



Water-Data Report 2008

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°25'06", long 74°47'14" referenced to North American Datum of 1983, Hopewell Township, Mercer County, NJ, Hydrologic Unit 02030105, at bridge on Rileyville Road, 0.5 mi southwest of Rileyville, 2.4 mi northeast of Hopewell, and 3.8 mi upstream of mouth.

DRAINAGE AREA.--1.28 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2005-08.

GAGE.--Reference point only.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Date	Discharge, in ft³/s
Nov 28, 2007	0.44
Feb 26, 2008	2.41
May 14, 2008	0.90

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2005 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background and Low Level Mercury Assessment special study site, NJ Department of Environmental Protection Watershed Management Area 10. Samples on Nov 2 and Mar 12 were for the Low-Level Mercury Assessment.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Instan- taneous dis- charge, ft ³ /s (00061)	Turbdy white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
Nov									
02...	0830	QC - Artificial, field blank	--	--	--	--	--	--	--
02...	0840	Surface water, regular	--	--	--	--	--	--	--
02...	0850	Surface water, regular	--	2.8	--	--	760	3.4	26
28...	1040	Surface water, regular	.44	3.5	.289	.231	761	8.7	68
Feb									
26...	1001	QC - Artificial, field blank	--	--	--	--	--	--	--
26...	1100	Surface water, regular	2.4	3.9	.147	.112	745	12.4	90
Mar									
12...	0803	QC - Artificial, field blank	--	--	--	--	--	--	--
12...	0815	Surface water, regular	--	3.7	--	--	742	10.2	82
May									
14...	1035	Surface water, regular	.90	4.4	.280	.214	758	8.6	79
Aug									
05...	1015	Surface water, regular	E.01	7.5	.216	.166	754	5.0	55

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	pH, water, unfltrd field, std units (00400)	Specific conduc- tance, wat unf μ S/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	6.9	191	6.0	9.5	--	--	--	--	--	--	--	--	--
28...	6.7	152	7.0	4.9	58	12.4	6.47	.93	5.78	25	8.63	<.12	22.9
Feb													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	7.0	114	6.0	1.5	33	7.34	3.64	.46	7.65	18	14.4	<.12	15.7
Mar													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	6.9	94	5.5	4.9	--	--	--	--	--	--	--	--	--
May													
14...	6.7	117	23.5	11.7	38	8.36	4.25	.60	6.94	31	10.4	<.12	21.0
Aug													
05...	7.0	160	21.4	19.7	61	13.5	6.67	.84	5.89	49	10.6	E.08	27.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)
Nov													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	31.0	E103	123	2	.31	.024	<.04	E.03	--	--	E.007	.010	.020
Feb													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	13.4	E74	83	4	.17	.014	.07	<.04	.24	--	E.007	E.006	.011
Mar													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
May													
14...	10.3	E81	87	<1	.30	E.009	E.03	E.03	E.33	E.36	E.005	.012	.021
Aug													
05...	13.0	E108	129	5	.31	.029	.10	.06	.41	.47	.012	.016	.038

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)	Barium, water, unfltrd recover-able, µg/L (01007)	Beryll-ium, water, unfltrd recover-able, µg/L (01012)	Boron, water, fltrd, µg/L (01020)	Boron, water, unfltrd recover-able, µg/L (01022)	Cadmium water, unfltrd, µg/L (01027)	Chrom-ium, water, unfltrd recover-able, µg/L (01034)	Copper, water, fltrd, µg/L (01040)
Nov													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	.3	<.04	.3	8.1	--	--	--	--	27	--	--	--	--
Feb													
26...	--	--	--	--	<.06	--	--	--	--	--	--	--	<1.0
26...	.2	<.04	.2	3.7	.18	<.60	14.1	E.03	12	9	.04	1.0	--
Mar													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
May													
14...	.3	<.04	.3	6.5	--	--	--	--	18	--	--	--	--
Aug													
05...	.5	<.04	.5	5.5	.54	.67	17.6	<.04	29	31	.02	.64	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, unfltrd recover-able, µg/L (01055)	Mercury water, fltrd, µg/L (71890)	Mercury water, unfltrd recover-able, µg/L (50286)	Mercury water, unfltrd recover-able, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover-able, µg/L (01067)	Selen-ium, water, unfltrd, µg/L (01147)	Silver, water, unfltrd recover-able, µg/L (01077)	Zinc, water, fltrd, µg/L (01090)
Nov													
02...	--	--	--	--	--	--	.04	--	--	--	--	--	--
02...	--	--	--	--	--	--	3.73	--	--	--	--	--	--
02...	--	--	--	--	--	--	3.84	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb													
26...	--	--	<.08	--	--	<.010	--	--	<.20	--	--	--	<1.8
26...	4.0	164	--	.38	9.5	--	--	<.010	--	2.4	.12	.03	--
Mar													
12...	--	--	--	--	--	--	.05	--	--	--	--	--	--
12...	--	--	--	--	--	--	6.38	--	--	--	--	--	--
May													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug													
05...	2.2	837	--	.68	134	--	--	<.010	--	1.0	.19	<.02	--

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 6 of 6

[QC, quality control sample. Remark codes: <, less than;
E, estimated.]

Date	Zinc, water, unfltrd recover -able, µg/L (01092)	Methyl- mercury water, unfltrd Low level ng/L (50284)
Nov		
<i>02...</i>	--	<.04
<i>02...</i>	--	.06
<i>02...</i>	--	.05
<i>28...</i>	--	--
Feb		
<i>26...</i>	--	--
<i>26...</i>	6.6	--
Mar		
<i>12...</i>	--	<.04
<i>12...</i>	--	<.04
May		
<i>14...</i>	--	--
Aug		
<i>05...</i>	3.8	--